

IN THE CLAIMS:

1. (Withdrawn) A server apparatus comprising:

development means for sequentially developing page-description-language data of each page of a print job comprising at least one page of a document and an insert mark usable to identify one or more replaceable pages of the document that are to be replaced with one or more other pages when the pages of the print job are printed;

print-image-data storage means for storing print image data corresponding to the page-description-language data that has been developed by said development means;

determining means for determining whether or not each page of the print job is a replaceable page, by comparing the insert mark set in the print job with the page-description-language data of each page in the print job;

creation means for creating for each print job to be printed management information, which includes page management information including information linking each page of the print job with each of the print image data stored in said storage means and information indicating whether or not each page of the print job is a replaceable page, and a job ID specifying the print job;

storage means for storing a job management table including the job management information for each of the print jobs;

list transfer means for transferring a job selection list to an image processing apparatus, the job selection list being created with reference to the job management table on the basis of a job-selection-list obtaining request from the image processing apparatus;

page-judgement-result transfer means for transferring information indicating whether or not a designated page of a designated print job is a replaceable page to the image processing apparatus with reference to the job management table in accordance with an inquiry from the image processing apparatus; and

image transfer means for transferring print image data stored in said print-image-data storage means to the image processing apparatus, the transferred print image data corresponding to a designated page of a print job designated in an image-data obtaining request from the image processing apparatus and being uniquely selected from the print image data stored in said print-image-data storage means with reference to the job management table on the basis of the image-data obtaining request from the image processing apparatus.

2. (Withdrawn) An apparatus according to claim 1, wherein the print job input from the image processing apparatus includes a user ID used in specifying the information processing apparatus, and the job management information includes a user ID corresponding to the print job.

3. (Withdrawn) A server apparatus which inputs a print job including an insert mark set in an information processing apparatus and page-description-language data of

documents of which a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, comprising:

development means for sequentially developing the page-description-language data of each page included in the print job to be input into the print image data;

storage means for storing each of the print image data developed by said development means;

judgment means for judging whether or not each page of the print job is an insert page to which image data externally input is inserted, by comparing the insert mark set in the print job with the page-description-language data of each page in the print job;

creation means for creating job management information, which includes page management information including information of linking each page of the print job with each of the print image data stored in said storage means and information of indicating whether or not each page of the print job is the insert page, and a job ID of specifying the print job, for each job to be input;

hold means for holding a job management table including the job management information for each of the jobs;

list transfer means for transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

page-judgment-result transfer means for transferring information indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with an inquiry from the image processing apparatus; and

image link means for storing the image data transferred from the image processing apparatus into said storage means and updating the page management information of the corresponded page so as to link the stored image data with the designated page of the designated print job.

4. (Withdrawn) An apparatus according to claim 3, wherein the print job input from the image processing apparatus includes a user ID used in specifying the information processing apparatus, and the job management information includes a user ID corresponding to the print job.

5. (Withdrawn) An image processing apparatus comprising:
issuance means for issuing a job-selection-list obtaining request usable to select print jobs being managed by a server apparatus;
selection means for selecting any of the print jobs and displaying a job selection list transferred from the server apparatus in response to the job-selection-list obtaining request issued by said issuance means; and

control means for at least partially controlling a print process in which, for each page of the selected print job, the server apparatus sequentially determines whether or not the page is a replaceable page that is to be replaced with one or more other pages when the page of the print job is printed, said information processing apparatus issues an image-data obtaining request to the server apparatus to obtain print image data corresponding to the pages of the selected print job in accordance with the determination of the server apparatus, said information processing apparatus transfers the obtained print image data transferred from the server apparatus to a printer unit while instructing the replacement of the replaceable page or pages of the print job with insert original pages scanned by a scanner unit in real time so that the print image data is printed by the printer unit with the replaceable page or pages being replaced by the insert original pages scanned by the scanner unit.

6. (Withdrawn) An apparatus according to claim 5, wherein an original feed device for feeding plural insert originals in the order of those originals to the scanner unit is provided,

wherein said control means causes the original feed device to feed the insert originals and performs the image input of the insert originals by the scanner unit.

7. (Withdrawn) An apparatus according to claim 5, wherein the job selection list is displayed including a job ID corresponding to each of the print jobs.

8. (Withdrawn) An apparatus according to claim 6, wherein the job selection list is displayed including a user ID corresponding to each of the print jobs.

9. (Withdrawn) An image processing apparatus comprising:
issuance means for issuing a job-selection-list obtaining request usable to select print jobs being managed by a server apparatus;
selection means for selecting any of the print jobs and displaying a job selection list transferred from the server apparatus in response to the job-selection-list obtaining request issued by said issuance means; and
control means for transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially determined whether or not the page is a replaceable page that is to be replaced with one or more other pages when the page of the print job is printed, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

10. (Withdrawn) An apparatus according to claim 9, wherein an original feed device for feeding plural insert originals in the order of those originals to the scanner unit is provided,
wherein said control means causes the original feed device to feed the insert originals and performs the image input of the insert originals by the scanner unit.

11. (Withdrawn) An apparatus according to claim 9, wherein the job selection list is displayed including a job ID corresponding to each of the print jobs.

12. (Withdrawn) An apparatus according to claim 10, wherein the job selection list is displayed including a user ID corresponding to each of the print jobs.

13. (Withdrawn) A control method of a server apparatus, said method comprising:

a development step of sequentially developing page-description-language data of each page of a print job comprising at least one page of a document and an insert mark usable to identify one or more replaceable pages of the document that are to be replaced with one or more other pages when the pages of the print job are printed;

a print-image-data storage step of storing developed print image data that corresponds to the page-description-language data into a memory;

a determining step of determining whether or not each page of the print job is a replaceable page by comparing the insert mark set in the print job with the page-description-language data of each page in the print job;

a creation step of creating for each print job to be printed management information, which includes page management information including information linking each page of the print job with each of the print image data stored in the memory and information indicating whether or not each page of the print job is a replaceable page, and a job ID specifying

the print job, and creating a job management table including the job management information for each of the jobs;

a list transfer step of transferring a job selection list to an image processing apparatus, the job selection list being created with reference to the job management table on the basis of a job-selection-list obtaining request from the image processing apparatus;

a page-judgment-result transfer step of transferring information indicating whether or not a designated page of a designated print job is a replaceable page to the image processing apparatus with reference to the job management table in accordance with an inquiry from the image processing apparatus; and

an image transfer step of transferring print image data stored in the memory to the image processing apparatus, the transferred print image data corresponding to a designated page of a print job designated in an image-data obtaining request from the image processing apparatus and being uniquely selected from the print image data stored in the memory with reference to the job management table on the basis of the image-data obtaining request from the image processing .

14. (Withdrawn) A control method of a server apparatus which inputs a print job including an insert mark set in an information processing apparatus and page-description-language data of documents of which a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for executing predetermined

image processing according to a communication performed between a scanner unit and a printer unit, said method comprising:

a development step of sequentially developing the page-description-language data of each page included in the print job to be input into the print image data;

a storage step of storing each of the developed print image data into a memory;

a judgment step of judging whether or not each page of the print job is an insert page to which image data externally input is inserted, by comparing the insert mark set in the print job with the page-description-language data of each page in the print job;

a creation step of creating job management information, which includes page management information including information of linking the each page of the print job with each of the print image data stored in the memory and information of indicating whether or not the each page of the print job is the insert page, and a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;

a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

a page-judgement-result transfer step of transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image

processing apparatus with reference to the job management table in accordance with inquiries from the image processing apparatus; and

an image link step of storing the image data transferred from the image processing apparatus into the memory and updating the page management information of the corresponded page so as to link the stored image data with the designated page of the designated print job.

15. (Withdrawn) A control method of an image processing apparatus said method comprising:

an issuance step of issuing a job-selection-list obtaining request usable to select print jobs being managed by a server apparatus;

a selection step of selecting any of the print jobs and displaying a job selection list transferred from the server apparatus in response to the job-selection-list obtaining request; and

a control step of at least partially controlling a print process in which, for each page of the selected print job, the server apparatus sequentially determines whether or not the page is a replaceable page that is to be replaced with one or more other pages when the page of the print job is printed, the information processing apparatus issues an image-data obtaining request to the server apparatus to obtain print image data corresponding to the pages of the selected print job in accordance with the determination of the server apparatus, the information processing apparatus transfers the obtained print image data transferred from the

server apparatus to a printer unit while instructing the replacement of the replaceable page or pages of the print job with insert original pages scanned by a scanner unit in real time so that the print image data is printed by the printer unit with the replaceable page or pages being replaced by the insert original pages scanned by the scanner unit.

16. (Withdrawn) A control method of an image processing apparatus said method comprising:

an issuance step of issuing a job-selection-list obtaining request usable to select print jobs being managed by a server apparatus;

a selection step of selecting any of the print jobs and displaying a job selection list transferred from the server apparatus in response to the job-selection-list obtaining request; and

a transfer step of transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially determined whether or not the page is a replaceable page that is to be replaced with one or more other pages when the page of the print job is printed, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

17. (Withdrawn) A computer-readable storage medium which stores programs used for executing steps in a control method of a server apparatus, comprising:

a development step of sequentially developing page-description-language data of each page of a print job comprising at least one page of a document and an insert mark usable to identify one or more replaceable pages of the document that are to be replaced with one or more other pages when the pages of the print job are printed;

a print-image-data storage step of storing developed print image data corresponding to the page-description-language data into a memory;

a determination step of determining whether or not each page of the print job is a replaceable page, by comparing the insert mark set in the print job with the page-description-language data of each page in the print job;

a creation step of creating for each print job to be printed management information, which includes page management information including information linking each page of the print job with each of the print image data stored in the memory and information indicating whether or not each page of the print job is the replaceable page, and a job ID specifying the print job, and creating a job management table including the job management information for each of the jobs;

a list transfer step of transferring a job selection list to an image processing apparatus, the job selection list being created with reference to the job management table on the basis of a job-selection-list obtaining request from the image processing apparatus;

a page-judgment-result transfer step of transferring information indicating whether or not a designated page of a designated print job is a replaceable page to the

image processing apparatus with reference to the job management table in accordance with an inquiry from the image processing apparatus; and

an image transfer step of transferring print image data stored in the memory to the image processing apparatus, the transferred print image data corresponding to a designated page of a print job designated in an image-data obtaining request from the image processing apparatus and being uniquely selected from the print image data stored in the memory with reference to the job management table on the basis of the image-data obtaining request from the image processing apparatus.

18. (Withdrawn) A computer-readable storage medium which stores programs used for executing steps in a control method of a server apparatus which inputs a print job including an insert mark set in an information processing apparatus and page-description-language data of documents of which a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, comprising:

a development step of sequentially developing the page-description-language data of each page included in the print job to be input into the print image data;

a storage step of storing each of the developed print image data into a memory;

a judgment step of judging whether or not each page of the print job is an insert page to which image data externally input is inserted, by comparing the insert mark set in the print job with the page-description-language data of each page in the print job;

a creation step of creating job management information, which includes page management information including information of linking each page of the print job with each of the print image data stored in the memory and information of indicating whether or not each page of the print job is the insert page, and a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;

a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

a page judgment result transfer step of transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with inquiries from the image processing apparatus; and

an image link step of storing the image data transferred from the image processing apparatus into the memory and updating the page management information of the corresponded page so as to link the stored image data with the designated page of the designated print job.

19. (Withdrawn) A computer-readable storage medium which stores programs used for executing steps in a control method of an image processing apparatus comprising:

an issuance step of issuing a job-selection-list obtaining request usable to select print jobs being managed by a server apparatus;

a selection step of selecting any of the print jobs and displaying a job selection list transferred from the server apparatus in response to the job-selection-list obtaining request; and

a control step of at least partially controlling a print process in which, for each page of the selected print job, the server apparatus sequentially determines whether or not the page is a replaceable page that is to be replaced with one or more other pages when the page of the print job is printed, the information processing apparatus issues an image-data obtaining request to the server apparatus to obtain print image data corresponding to the pages of the selected print job in accordance with the determination of the server apparatus, the information processing apparatus transfers the obtained print image data transferred from the server apparatus to a printer unit while instructing the replacement sheet of the replaceable page or pages of the print job with insert original pages scanned by a scanner unit in real time so that the print image data is printed by the printer unit with the replaceable page or pages being replaced by the insert original pages scanned by the scanner unit.

20. (Withdrawn) A computer-readable storage medium which stores programs used for executing steps in a control method of an image processing apparatus comprising:

an issuance step of issuing a job-selection-list obtaining request used to select print jobs being managed by a server apparatus;

a selection step of selecting any of the print jobs and displaying a job selection list transferred from the server apparatus in response to the job-selection-list obtaining request; and

a transfer step of transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially determined whether or not the page is a replaceable page that is to be replaced with one or more other pages when the page of the print job is printed, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

21. (Previously Presented) A controlling apparatus comprising:

an input unit adapted to input data from a remote information processing apparatus which can selectively send data of a series of originals including at least both of a specific page including a command for causing a printer apparatus to perform a specific processing and a page where the command is not included and data of a series of originals where the specific page is not included; and

a controller adapted to cause the printer apparatus to perform a printing process of input originals data from the remote information processing apparatus,

wherein said controller causes the printer apparatus to perform the printing process of the data and causes the printer apparatus to perform the specific processing, in case that the data input by said input unit is the data of the series of originals including at least both of the specific page including the command for causing the printer apparatus to perform the specific processing and the page where the command is not included, and

wherein said controller causes the printer apparatus to perform the printing process of the data, without executing the specific processing, in case that the data input by said input unit is the data of the series of originals where the specific page is not included.

22. (Previously Presented) An apparatus according to claim 21, wherein said controller causes the printer apparatus not to print the page to which the information indicating the instruction for the printer apparatus is added.

23. (Previously Presented) An apparatus according to claim 22, wherein said controller executes processing aimed for generating data, of which state is that an instruction added page in original data input from the information processing apparatus is exchanged to a page of the original data from a scanner unit, as one document.

24. (Previously Presented) An apparatus according to claim 23, wherein said controller prints data obtained by performing an exchange between the instruction added page in the original data input from the information processing apparatus and the page of the original data from the scanner unit as one document.

25. (Previously Presented) An apparatus according to claim 23, wherein said controller stores data obtained by performing an exchange between the instruction added page in the original data input from the information processing apparatus and the page of the original data from the scanner unit into storage means as one document.

26. (Previously Presented) An apparatus according to claim 22, wherein the image formation apparatus has storage means for previously storing sheets on which images were formed, and said controller causes the image formation apparatus to print the pages other than the page, to which the information indicating the instruction for the image formation apparatus is added, included in the data of a series of the originals and the sheets on which images were formed are previously fed from the storage means in accordance with a fact that the page judged to exist in the input data of the series of originals is the page to which the information indicating the instruction for the image formation apparatus is added, then processing for inserting the fed sheet among sheets, on which images of the pages other than the page to which the information indicating the instruction is added are formed, is executed on the basis of the instruction.

27. (Previously Presented) An image processing method adapted to an apparatus having an input unit adapted to input data from a remote information processing apparatus which can selectively send data of a series of originals including at least both of a specific page including a command for causing a printer apparatus to perform a specific processing and a page where the command is not included and data of a series of originals where the specific page is not included, said method comprising:

causing the printer apparatus to perform a printing process of input originals data from the remote information processing apparatus; and

causing the printer apparatus to perform the printing process of the data and causing the printer apparatus to perform the specific processing, in case that the data input by the input unit is the data of the series of originals including at least both of the specific page including the command for causing the printer apparatus to perform the specific processing and the page where the command is not included; and

causing the printer apparatus to perform the printing process of the data, without executing the specific processing, in case that the data input by the input unit is the data of the series of originals where the specific page is not included.

28. (Previously Presented) A computer-readable storage medium which stores programs for an image processing method adapted to an apparatus having an input unit adapted to input data from a remote information processing apparatus which can selectively send data of a series of originals including at least both of a specific page including a command for

causing a printer apparatus to perform a specific processing and a page where the command is not included and data of a series of originals where the specific page is not included comprising:

causing the printer apparatus to perform a printing process of input originals data from the remote information processing apparatus; and

causing the printer apparatus to perform the printing process of the data and causing the printer apparatus to perform the specific processing, in case that the data input by the input unit is the data of the series of originals including at least both of the specific page including the command for causing the printer apparatus to perform the specific processing and the page where the command is not included; and

causing the printer apparatus to perform the printing process of the data, without executing the specific processing, in case that the data input by the input unit is the data of the series of originals where the specific page is not included.

29. (Withdrawn) An information processing apparatus which can send data to a remote device, said apparatus comprising:

generator adapted to generate, selectively, data of a series of originals including at least both of a specific page including a command for causing a printer apparatus to perform a specific processing and a page where the command is not included and data of a series of originals where the specific page is not included; and

a controller adapted to cause the printer apparatus to perform the printing process of the data and causes the printer apparatus to perform the specific processing, in

case that the data generated by said generator is the data of the series of originals including at least both of the specific page including the command for causing the printer apparatus to perform the specific processing and the page where the command is not included,

wherein said controller causes the printer apparatus to perform the printing process of the data, without executing the specific processing, in case that the data generated by said generator is the data of the series of originals where the specific page is not included.

30. (Withdrawn) An information control method adapted to an information processing apparatus which can send data to a remote device, said method comprising:

generating, selectively, data of a series of originals including at least both of a specific page including a command for causing a printer apparatus to perform a specific processing and a page where the command is not included and data of a series of originals where the specific page is not included;

causing the printer apparatus to perform the printing process of the data and causing the printer apparatus to perform the specific processing, in case that the data generated is the data of the series of originals including at least both of the specific page including the command for causing the printer apparatus to perform said specific processing and the page where the command is not included; and

causing the printer apparatus to perform the printing process of the data without executing the specific processing, in case that the generated data is the data of the series of originals where the specific page is not included.

31. (Withdrawn) A computer-readable storage medium which stores programs for an information control method adapted to an information processing apparatus which can send data to a remote device, said method comprising:

generating, selectively, data of a series of originals including at least both of a specific page including a command for causing a printer apparatus to perform a specific processing and a page where the command is not included and data of a series of originals where the specific page is not included;

causing the printer apparatus to perform the printing process of the data and causing the printer apparatus to perform the specific processing, in case that the data generated is the data of the series of originals including at least both of the specific page including the command for causing the printer apparatus to perform said specific processing and the page where the command is not included; and

causing the printer apparatus to perform the printing process of the data without executing the specific processing, in case that the generated data is the data of the series of originals where the specific page is not included.

32. (Previously Presented) A method according to claim 27, further comprising causing the image formation apparatus not to print the page to which the information indicating the instruction for the image formation apparatus is added.

33. (Previously Presented) A method according to claim 27, further comprising executing processing aimed for generating data, of which state is that an instruction added page in original data input from the information processing apparatus is exchanged to a page of the original data from a scanner unit, as one document.

34. (Previously Presented) A method according to claim 27, further comprising printing data obtained by performing an exchange between the instruction added page in the original data input from the information processing apparatus and the page of the original data from the scanner unit as one document.

35. (Previously Presented) A method according to claim 27, further comprising storing data obtained by performing an exchange between the instruction added page in the original data input from the information processing apparatus and the page of the original data from the scanner unit into storage means as one document.

36. (Previously Presented) A method according to claim 27, further comprising providing storage means for previously storing sheets on which images were formed,

and causing the image formation apparatus to print the pages other than the page, to which the information indicating the instruction for the image formation apparatus is added, included in the data of a series of the originals and the sheets on which images were formed are previously fed from the storage means in accordance with a fact that the page judged to exist in the input data of the series of originals is the page to which the information indicating the instruction for the image formation apparatus is added, then processing for inserting the fed sheet among sheets, on which images of the pages other than the page to which the information indicating the instruction is added are formed, is executed on the basis of the instruction.